

SEQUENCE LISTING

<110> NsGene A/S
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<120> Therapeutic use of a growth factor, NsG33

<130> 522-204-WO

<150> DK PA 2004 00510
 <151> 2004-03-30

<150> DK PA 2004.00843
 <151> 2004-05-28

<150> US 60/575,086
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Met Gly Phe Pro Ala Ala Ala Leu Leu Cys Ala Leu Cys Cys Gly Leu
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 Leu Arg Leu Thr Leu Gly Gly Pro Asp Pro Arg Ala Arg Pro Gly Ile
 65 70 75 80
 Ala Cys Leu Arg Pro Val Arg Pro Phe Ala Gly Ala Gln Val Phe Ala
 85 90 95
 Glu Arg Ala Gly Gly Ala Leu Glu Leu Leu Ala Glu Gly Pro Gly
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 Pro Ala Gly Gly Arg Cys Val Arg Trp Gly Pro Arg Glu Arg Arg Ala
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Pro Gln Ala Gln Gly Leu Gly Val Asp Gly Ala Cys Arg Pro Cys Ser
 35 40 45

Asp Ala Glu Leu Leu Leu Ala Ala Cys Thr Ser Asp Phe Val Ile His
 50 55 60

Gly Thr Ile His Gly Val Ala His Asp Thr Glu Leu Gln Glu Ser Val
 65 70 75 80

Ile Thr Val Val Val Ala Arg Val Ile Arg Gln Thr Leu Pro Leu Phe
 85 90 95

Lys Glu Gly Ser Ser Glu Gly Gln Gly Arg Ala Ser Ile Arg Thr Leu
 100 105 110

Leu Arg Cys Gly Val Arg Pro Gly Pro Gly Ser Phe Leu Phe Met Gly
 115 120 125

Trp Ser Arg Phe Gly Glu Ala Trp Leu Gly Cys Ala Pro Arg Phe Gln
 130 135 140

Glu Phe Ser Arg Val Tyr Ser Ala Ala Leu Thr Thr His Leu Asn Pro
 145 150 155 160

Cys Glu Met Ala Leu Asp
 165

<210> 11
 <211> 2321
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> misc_feature
 <222> (17)..(66)
 <223> n is a, c, g, or t

<400> 11
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 nnnnnnggca gcagcccagag ccccgcgcg tcccctaacc atgctggtag cggcgcttct 120
 ctgcgcgctg tgctgcggcc tcttggtgc gtccgctcga gctggctact ccgaggaccg 180
 ctgcagctgg aggggcaggt acccaggaga gatattgggg aggatttttg ttatttgtgt 240
 tttaaattga aatcttggtg tggagggtc cctcccactt ggaactgagg aagcgcagac 300
 ctcaatgtcc tgttcagag ggtggacgca ggtgttggtg gccgcgggaa aagggttgag 360
 cgggctaggg aatgagggc caccacactg agaaccaccg tctgtcccc agcggtttga 420
 ccaggaacc tggcagcgtg gggcagctga ccctggattg tactgagggt gctatcgagt 480
 ggctgtatcc agctggggcg ctgcgctga ctetaggcgg ctctgatccg ggcacgcggc 540
 ccagcatcgt ctgtctgcgc ccaacacggc ccttcgctgg tgcccaggtc ttcgctgaac 600
 ggatggccgg caacctagag ttgctactgg ccgagggcca aggcctggct gggggccgct 660
 gcatgcgtg gggtcctcgc gagcgcgag cccttttcct gcaggccacg ccacaccggg 720
 acatcagccg cagagttgct gccttccaat ttgaactgca cgaggaccaa cgtgcagaaa 780
 tgtctcccca ggccaaggt tttggtgtgg atggtgagt actagactgg ctggggcgga 840
 gctgggtgtc agaaactggc cctctacact ggcctgatcc gaatgggcct tgcctcccca 900
 ctgcaccgaa agccctgtag cttgacggag gctactctgg tggagaacac agtggcttcc 960

12

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aggatcatagg gaggtgagtt gagagtcttc cctcctttct ctcctcctct tcaaggttcg 1020
gttttaggaaa agagcgggag ggggcagatg ccagagaggc cagccttggg tctctggttt 1080
ctgaagggtt ggggggaagg gttgggctgg ggcagaatca aagcctatgg ccgaagctgt 1140
ccagggctcc ctggccttgt ggtgacctcc ttccccctcc cctagcccaa ccaacaaaag 1200
tccagtgtgc ctcttcgtca ccatggagac tgccctgccct gcctcccggc agggcaccag 1260
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atgctgggag aagggttttag tcgccagctc ctgtaccttc tcctactgtg gggagctgtg 1560
ggcttgtgct gagagatcac aggcctgcct gatgacctgc cttgcatgct aggtgcctgc 1620
aggccctgca gtgatgccga gtccttcttg actgcatgca ccagtgactt tggtagtgt 1680
ttcgtcttg ggagagctta gggctctgcc cacattccca cgtgccacc actggccacc 1740
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agaatcagtc atcactgtgg tggccactcg tgtcatccgc cagacactgc cactgttcca 1860
ggaagggagc tcggagggcc ggggccaggc ctccgttcgt acctgttgc gctgtggtgt 1920
ggctcctggc ccaggtcct tcctcttcat gggtggagc cgatttggcg aagcttggt 1980
gggctgcgt ccccgcttcc aagagttcag ccgtgtctat tcagctgctc tcgcggccca 2040
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ttcctctggg gatggggtgt tggggagggg tgataggagg gtgggtggga aggggtgtggc 2160
tcagatggca tcctggtacc cacagtgagg tggtagaata ctaaataaacc tggatcacac 2220
cagccactgt agacatggtc ttctgtgaca ggcaggctca ctcagctctg ctctgcctc 2280
actttaccta ctctccagtc tgetgccctt ctgaccttc t 2321

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<210> 12
<211> 1026
<212> DNA
<213> Rattus norvegicus

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<220>
<221> CDS
<222> (1)..(876)

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<400> 12
atg ctg gta gcg gcg ctt ctc tgc gcg ctg tgc tgc ggc ctc ttg gct 48
Met Leu Val Ala Ala Leu Leu Cys Ala Leu Cys Cys Gly Leu Leu Ala
1 5 10 15

gcg tcc gct cga gct ggc tac tcc gag gac cgc tgc agc tgg agg ggc 96
Ala Ser Ala Arg Ala Gly Tyr Ser Glu Asp Arg Cys Ser Trp Arg Gly
20 25 30

agc ggt ttg acc cag gaa cct ggc agc gtg ggg cag ctg acc ctg gat 144
Ser Gly Leu Thr Gln Glu Pro Gly Ser Val Gly Gln Leu Thr Leu Asp
35 40 45

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13

tgt act gag ggt gct atc gag tgg ctg tat cca gct ggg gcg ctg cgc Cys Thr Glu Gly Ala Ile Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg 50 55 60	192
ctg act cta ggc ggc tct gat ccg ggc acg cgg ccc agc atc gtc tgt Leu Thr Leu Gly Gly Ser Asp Pro Gly Thr Arg Pro Ser Ile Val Cys 65 70 75 80	240
ctg cgc cca aca cgg ccc ttc gct ggt gcc cag gtc ttc gct gaa cgg Leu Arg Pro Thr Arg Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg 85 90 95	288
atg gcc ggc aac cta gag ttg cta ctg gcc gag ggc caa ggc ctg gct Met Ala Gly Asn Leu Glu Leu Leu Leu Ala Glu Gly Gln Gly Leu Ala 100 105 110	336
ggg ggc cgc tgc atg cgc tgg ggt cct cgc gag cgc cga gcc ctt ttc Gly Gly Arg Cys Met Arg Trp Gly Pro Arg Glu Arg Arg Ala Leu Phe 115 120 125	384
ctg cag gcc acg cca cac cgg gac atc agc cgc aga gtt gct gcc ttc Leu Gln Ala Thr Pro His Arg Asp Ile Ser Arg Arg Val Ala Ala Phe 130 135 140	432
caa ttt gaa ctg cac gag gac caa cgt gca gaa atg tct ccc cag gcc Gln Phe Glu Leu His Glu Asp Gln Arg Ala Glu Met Ser Pro Gln Ala 145 150 155 160	480
caa ggt ttt ggt gtg gat ggt gcc tgc agg ccc tgc agt gat gcc gag Gln Gly Phe Gly Val Asp Gly Ala Cys Arg Pro Cys Ser Asp Ala Glu 165 170 175	528
ctc ctt ctg act gca tgc acc agt gac ttt gtg atc cat ggg acc atc Leu Leu Leu Thr Ala Cys Thr Ser Asp Phe Val Ile His Gly Thr Ile 180 185 190	576
cat ggg gtc gtc cat gac atg gag ctg caa gaa tca gtc atc act gtg His Gly Val Val His Asp Met Glu Leu Gln Glu Ser Val Ile Thr Val 195 200 205	624
gtg gcc act cgt gtc atc cgc cag aca ctg cca ctg ttc cag gaa ggg Val Ala Thr Arg Val Ile Arg Gln Thr Leu Pro Leu Phe Gln Glu Gly 210 215 220	672
agc tcg gag ggc cgg ggc cag gcc tcc gtt cgt acc ttg ttg cgc tgt Ser Ser Glu Gly Arg Gly Gln Ala Ser Val Arg Thr Leu Leu Arg Cys 225 230 235 240	720
ggt gtg cgt cct ggc cca ggc tcc ttc ctc ttc atg ggc tgg agc cga Gly Val Arg Pro Gly Pro Gly Ser Phe Leu Phe Met Gly Trp Ser Arg 245 250 255	768
ttt ggc gaa gct tgg ctg ggc tgc gct ccc cgc ttc caa gag ttc agc Phe Gly Glu Ala Trp Leu Gly Cys Ala Pro Arg Phe Gln Glu Phe Ser 260 265 270	816
cgt gtc tat tca gct gct ctc gcg gcc cac ctc aac cca tgt gag gtg Arg Val Tyr Ser Ala Ala Leu Ala Ala His Leu Asn Pro Cys Glu Val 275 280 285	864
gca ctg gac tga gagacctggg agcaagccct ggatggatct tcctctgggg Ala Leu Asp 290	916
atgggggtgtt ggggaggggt gataggaggg tgggtgggaa ggggtgtggct cagatggcat	976
cctggtaccc acagtgaggt ggtagaatac taaataacct ggatcacacc	1026

14

<210> 13
 <211> 291
 <212> PRT
 <213> Rattus norvegicus

<400> 13
 Met Leu Val Ala Ala Leu Leu Cys Ala Leu Cys Cys Gly Leu Leu Ala
 1 5 10 15
 Ala Ser Ala Arg Ala Gly Tyr Ser Glu Asp Arg Cys Ser Trp Arg Gly
 20 25 30
 Ser Gly Leu Thr Gln Glu Pro Gly Ser Val Gly Gln Leu Thr Leu Asp
 35 40 45
 Cys Thr Glu Gly Ala Ile Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg
 50 55 60
 Leu Thr Leu Gly Gly Ser Asp Pro Gly Thr Arg Pro Ser Ile Val Cys
 65 70 75 80
 Leu Arg Pro Thr Arg Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg
 85 90 95
 Met Ala Gly Asn Leu Glu Leu Leu Leu Ala Glu Gly Gln Gly Leu Ala
 100 105 110
 Gly Gly Arg Cys Met Arg Trp Gly Pro Arg Glu Arg Arg Ala Leu Phe
 115 120 125
 Leu Gln Ala Thr Pro His Arg Asp Ile Ser Arg Arg Val Ala Ala Phe
 130 135 140
 Gln Phe Glu Leu His Glu Asp Gln Arg Ala Glu Met Ser Pro Gln Ala
 145 150 155 160
 Gln Gly Phe Gly Val Asp Gly Ala Cys Arg Pro Cys Ser Asp Ala Glu
 165 170 175
 Leu Leu Leu Thr Ala Cys Thr Ser Asp Phe Val Ile His Gly Thr Ile
 180 185 190
 His Gly Val Val His Asp Met Glu Leu Gln Glu Ser Val Ile Thr Val
 195 200 205
 Val Ala Thr Arg Val Ile Arg Gln Thr Leu Pro Leu Phe Gln Glu Gly
 210 215 220
 Ser Ser Glu Gly Arg Gly Gln Ala Ser Val Arg Thr Leu Leu Arg Cys
 225 230 235 240
 Gly Val Arg Pro Gly Pro Gly Ser Phe Leu Phe Met Gly Trp Ser Arg
 245 250 255
 Phe Gly Glu Ala Trp Leu Gly Cys Ala Pro Arg Phe Gln Glu Phe Ser
 260 265 270
 Arg Val Tyr Ser Ala Ala Leu Ala Ala His Leu Asn Pro Cys Glu Val
 275 280 285
 Ala Leu Asp
 290

<210> 14
 <211> 275
 <212> PRT
 <213> Rattus norvegicus

15

<220>

<221> MISC_FEATURE

<222> (1)..(5)

<223> Potentially part of signal peptide

<400> 14

Ala Ser Ala Arg Ala Gly Tyr Ser Glu Asp Arg Cys Ser Trp Arg Gly
 1 5 10 15

Ser Gly Leu Thr Gln Glu Pro Gly Ser Val Gly Gln Leu Thr Leu Asp
 20 25 30

Cys Thr Glu Gly Ala Ile Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg
 35 40 45

Leu Thr Leu Gly Gly Ser Asp Pro Gly Thr Arg Pro Ser Ile Val Cys
 50 55 60

Leu Arg Pro Thr Arg Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg
 65 70 75 80

Met Ala Gly Asn Leu Glu Leu Leu Leu Ala Glu Gly Gln Gly Leu Ala
 85 90 95

Gly Gly Arg Cys Met Arg Trp Gly Pro Arg Glu Arg Arg Ala Leu Phe
 100 105 110

Leu Gln Ala Thr Pro His Arg Asp Ile Ser Arg Arg Val Ala Ala Phe
 115 120 125

Gln Phe Glu Leu His Glu Asp Gln Arg Ala Glu Met Ser Pro Gln Ala
 130 135 140

Gln Gly Phe Gly Val Asp Gly Ala Cys Arg Pro Cys Ser Asp Ala Glu
 145 150 155 160

Leu Leu Leu Thr Ala Cys Thr Ser Asp Phe Val Ile His Gly Thr Ile
 165 170 175

His Gly Val Val His Asp Met Glu Leu Gln Glu Ser Val Ile Thr Val
 180 185 190

Val Ala Thr Arg Val Ile Arg Gln Thr Leu Pro Leu Phe Gln Glu Gly
 195 200 205

Ser Ser Glu Gly Arg Gly Gln Ala Ser Val Arg Thr Leu Leu Arg Cys
 210 215 220

Gly Val Arg Pro Gly Pro Gly Ser Phe Leu Phe Met Gly Trp Ser Arg
 225 230 235 240

Phe Gly Glu Ala Trp Leu Gly Cys Ala Pro Arg Phe Gln Glu Phe Ser
 245 250 255

Arg Val Tyr Ser Ala Ala Leu Ala Ala His Leu Asn Pro Cys Glu Val
 260 265 270

Ala Leu Asp
 275

<210> 15

<211> 166

<212> PRT

<213> Rattus norvegicus

<400> 15

Ala Leu Phe Leu Gln Ala Thr Pro His Arg Asp Ile Ser Arg Arg Val
 1 5 10 15

16

Ala Ala Phe Gln Phe Glu Leu His Glu Asp Gln Arg Ala Glu Met Ser
 20 25 30
 Pro Gln Ala Gln Gly Phe Gly Val Asp Gly Ala Cys Arg Pro Cys Ser
 35 40 45
 Asp Ala Glu Leu Leu Leu Thr Ala Cys Thr Ser Asp Phe Val Ile His
 50 55 60
 Gly Thr Ile His Gly Val Val His Asp Met Glu Leu Gln Glu Ser Val
 65 70 75 80
 Ile Thr Val Val Ala Thr Arg Val Ile Arg Gln Thr Leu Pro Leu Phe
 85 90 95
 Gln Glu Gly Ser Ser Glu Gly Arg Gly Gln Ala Ser Val Arg Thr Leu
 100 105 110
 Leu Arg Cys Gly Val Arg Pro Gly Pro Gly Ser Phe Leu Phe Met Gly
 115 120 125
 Trp Ser Arg Phe Gly Glu Ala Trp Leu Gly Cys Ala Pro Arg Phe Gln
 130 135 140
 Glu Phe Ser Arg Val Tyr Ser Ala Ala Leu Ala Ala His Leu Asn Pro
 145 150 155 160
 Cys Glu Val Ala Leu Asp
 165

<210> 16
 <211> 498
 <212> DNA
 <213> Homo sapiens

<400> 16
 gccctcttcc tgcaggccac gccgcaccag gacatcagcc gccgcgtggc cgccttccgc 60
 tttgagctgc gcgaggacgg gcgccccgag ctgccccgc aggcccacgg tctcggcgta 120
 gacggtgcct gcaggccctg cagcgacgct gagctgctcc tggccgcatg caccagcgac 180
 ttcgtaattc acgggatcat ccatggggtc acccatgacg tggagctgca ggagtctgtc 240
 atcactgtgg tggcggcccg tgtcctccgc cagacaccgc cgctgttcca ggcggggcga 300
 tccggggacc aggggctgac ctccattcgt acccactgc gctgtggcgt ccacccgggc 360
 ccaggcacct tctcttcat gggctggagc cgctttgggg aggcccggt gggctgtgcc 420
 ccacgattcc aggagtccg ccgtgcctac gaggtgccc gtgctgcca cctccacccc 480
 tgcgaggtgg cgctgcac 498

<210> 17
 <211> 498
 <212> DNA
 <213> Mus musculus

<400> 17
 gcccttttcc tgcaggccac accacaccgc gacatcagcc gcagagttgc tgccttccgt 60
 tttgaactgc acgaggacca acgtgcagaa atgtctcccc aggctcaagg tcttggtgtg 120
 gatggtgcct gcaggccctg cagtgatgcc gagctcctcc tggctgcatg caccagtgat 180
 tttgtgatcc acgggacat ccatggggtc gcccatgaca cagagctgca agaatacgtc 240

17

atcactgtgg tgggtgctcg tgtcatccgc cagacactgc cactgttcaa ggaagggagc 300
 tcggagggcc aaggccgggc ctccattcgt accttgctgc gctgtggtgt gcgtcctggc 360
 ccaggctcct tcctcttcat gggctggagc cgatttggcg aagcttggct gggctgtgct 420
 ccccgcttcc aagagttcag ccgtgtctat tcagctgctc tcacgacca tctcaacca 480
 tgtgagatgg cactggac 498

<210> 18
 <211> 498
 <212> DNA
 <213> Rattus norvegicus

<400> 18
 gcccttttcc tgcaggccac gccacaccgg gacatcagcc gcagagttgc tgccttccaa 60
 tttgaactgc acgaggacca acgtgcagaa atgtctcccc aggcccaagg ttttgggtgtg 120
 gatggtgcct gcaggccctg cagtgatgcc gagctccttc tgactgcatg caccagtgc 180
 tttgtgatcc atgggaccat ccatggggtc gtccatgaca tggagctgca agaatcagtc 240
 atcactgtgg tggccactcg tgtcatccgc cagacactgc cactgttcca ggaagggagc 300
 tcggagggcc ggggccaggc ctccgttcgt accttggtgc gctgtggtgt gcgtcctggc 360
 ccaggctcct tcctcttcat gggctggagc cgatttggcg aagcttggct gggctgctgt 420
 ccccgcttcc aagagttcag ccgtgtctat tcagctgctc tcggggccca cctcaacca 480
 tgtgaggtgg cactggac 498

<210> 19
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 19
 Gly Tyr Ser Glu Glu Arg Cys Ser Trp Arg Gly Ser Gly Leu Thr Gln
 1 5 10 15
 Glu Pro Gly Ser Val Gly Gln Leu Ala Leu Ala Cys Ala Glu Gly Ala
 20 25 30
 Val Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg Leu Thr Leu Gly Gly
 35 40 45
 Pro Asp Pro Arg Ala Arg Pro Gly Ile Ala Cys Leu Arg Pro Val Arg
 50 55 60
 Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg Ala Gly Gly Ala Leu
 65 70 75 80
 Glu Leu Leu Leu Ala Glu Gly Pro Gly Pro Ala Gly Gly Arg Cys Val
 85 90 95
 Arg Trp Gly Pro Arg Glu Arg Arg
 100

<210> 20
 <211> 104
 <212> PRT
 <213> Mus musculus

18

<400> 20
 Gly Tyr Ser Glu Asp Arg Cys Ser Trp Arg Gly Ser Gly Leu Thr Gln
 1 5 10 15
 Glu Pro Gly Ser Val Gly Gln Leu Thr Leu Asp Cys Thr Glu Gly Ala
 20 25 30
 Ile Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg Leu Thr Leu Gly Gly
 35 40 45
 Pro Asp Pro Gly Thr Arg Pro Ser Ile Val Cys Leu Arg Pro Glu Arg
 50 55 60
 Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg Met Thr Gly Asn Leu
 65 70 75 80
 Glu Leu Leu Leu Ala Glu Gly Pro Asp Leu Ala Gly Gly Arg Cys Met
 85 90 95
 Arg Trp Gly Pro Arg Glu Arg Arg
 100

<210> 21
 <211> 109
 <212> PRT
 <213> Rattus norvegicus

<220>
 <221> MISC_FEATURE
 <222> (1)..(5)
 <223> Potentially part of signal peptide

<400> 21
 Ala Ser Ala Arg Ala Gly Tyr Ser Glu Asp Arg Cys Ser Trp Arg Gly
 1 5 10 15
 Ser Gly Leu Thr Gln Glu Pro Gly Ser Val Gly Gln Leu Thr Leu Asp
 20 25 30
 Cys Thr Glu Gly Ala Ile Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg
 35 40 45
 Leu Thr Leu Gly Gly Ser Asp Pro Gly Thr Arg Pro Ser Ile Val Cys
 50 55 60
 Leu Arg Pro Thr Arg Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg
 65 70 75 80
 Met Ala Gly Asn Leu Glu Leu Leu Leu Ala Glu Gly Gln Gly Leu Ala
 85 90 95
 Gly Gly Arg Cys Met Arg Trp Gly Pro Arg Glu Arg Arg
 100 105

<210> 22
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 22
 Gly Tyr Ser Glu Glu Arg Cys Ser Trp Arg Gly Ser Gly Leu Thr Gln
 1 5 10 15
 Glu Pro Gly Ser Val Gly Gln Leu Ala Leu Ala Cys Ala Glu Gly Ala
 20 25 30
 Val Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg Leu Thr Leu Gly Gly
 35 40 45

19

Pro Asp Pro Arg Ala Arg Pro Gly Ile Ala Cys Leu Arg Pro Val Arg
 50 55 60

Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg Ala Gly Gly Ala Leu
 65 70 75 80

Glu Leu Leu Leu Ala Glu Gly Pro Gly Pro Ala Gly Gly Arg Cys Val
 85 90 95

Arg

<210> 23
 <211> 97
 <212> PRT
 <213> Mus musculus

<400> 23
 Gly Tyr Ser Glu Asp Arg Cys Ser Trp Arg Gly Ser Gly Leu Thr Gln
 1 5 10 15

Glu Pro Gly Ser Val Gly Gln Leu Thr Leu Asp Cys Thr Glu Gly Ala
 20 25 30

Ile Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg Leu Thr Leu Gly Gly
 35 40 45

Pro Asp Pro Gly Thr Arg Pro Ser Ile Val Cys Leu Arg Pro Glu Arg
 50 55 60

Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg Met Thr Gly Asn Leu
 65 70 75 80

Glu Leu Leu Leu Ala Glu Gly Pro Asp Leu Ala Gly Gly Arg Cys Met
 85 90 95

Arg

<210> 24
 <211> 102
 <212> PRT
 <213> Rattus norvegicus

<220>
 <221> MISC_FEATURE
 <222> (1)..(5)
 <223> Potentially part of signal peptide

<400> 24
 Ala Ser Ala Arg Ala Gly Tyr Ser Glu Asp Arg Cys Ser Trp Arg Gly
 1 5 10 15

Ser Gly Leu Thr Gln Glu Pro Gly Ser Val Gly Gln Leu Thr Leu Asp
 20 25 30

Cys Thr Glu Gly Ala Ile Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg
 35 40 45

Leu Thr Leu Gly Gly Ser Asp Pro Gly Thr Arg Pro Ser Ile Val Cys
 50 55 60

Leu Arg Pro Thr Arg Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg
 65 70 75 80

Met Ala Gly Asn Leu Glu Leu Leu Leu Ala Glu Gly Gln Gly Leu Ala
 85 90 95

20

Gly Gly Arg Cys Met Arg
100

<210> 25
<211> 1363
<212> DNA
<213> Mus musculus

<220>
<221> CDS
<222> (84)..(959)

<400> 25
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aggccccggc gcgtcccta acc atg ctg gta gcc acg ctt ctt tgc gcg ctc 113
Met Leu Val Ala Thr Leu Leu Cys Ala Leu
1 5 10
tgt tgc gcc ctc ctg gcc gcg tcc gct cac gct ggc tac tcg gaa gac 161
Cys Cys Gly Leu Leu Ala Ala Ser Ala His Ala Gly Tyr Ser Glu Asp
15 20 25
cgc tgc agc tgg agg gcc agc ggt ttg acc cag gag cct ggc agc gtg 209
Arg Cys Ser Trp Arg Gly Ser Gly Leu Thr Gln Glu Pro Gly Ser Val
30 35 40
ggg cag ctg acc ctg gac tgt act gag gcc gct atc gag tgg ctg tac 257
Gly Gln Leu Thr Leu Asp Cys Thr Glu Gly Ala Ile Glu Trp Leu Tyr
45 50 55
cca gct ggg gcg ctg cgc ctg acc ctg gcc gcc ccc gat ccg gcc aca 305
Pro Ala Gly Ala Leu Arg Leu Thr Leu Gly Gly Pro Asp Pro Gly Thr
60 65 70
cgg ccc agc atc gtc tgt ctg cgc cca gag cgg ccc ttc gct ggt gcc 353
Arg Pro Ser Ile Val Cys Leu Arg Pro Glu Arg Pro Phe Ala Gly Ala
75 80 85 90
cag gtc ttc gct gaa cgt atg acc gcc aat cta gag ttg cta ctg gcc 401
Gln Val Phe Ala Glu Arg Met Thr Gly Asn Leu Glu Leu Leu Leu Ala
95 100 105
gag gcc ccg gac ctg gct ggg gcc cgc tgc atg cgc tgg ggt ccc cgc 449
Glu Gly Pro Asp Leu Ala Gly Gly Arg Cys Met Arg Trp Gly Pro Arg
110 115 120
gag cgc cga gcc ctt ttc ctg cag gcc aca cca cac cgc gac atc agc 497
Glu Arg Arg Ala Leu Phe Leu Gln Ala Thr Pro His Arg Asp Ile Ser
125 130 135
cgc aga gtt gct gcc ttc cgt ttt gaa ctg cac gag gac caa cgt gca 545
Arg Arg Val Ala Ala Phe Arg Phe Glu Leu His Glu Asp Gln Arg Ala
140 145 150
gaa atg tct ccc cag gct caa ggt ctt ggt gtg gat ggt gcc tgc agg 593
Glu Met Ser Pro Gln Ala Gln Gly Leu Gly Val Asp Gly Ala Cys Arg
155 160 165 170
ccc tgc agt gat gcc gag ctc ctc ctg gct gca tgc acc agt gat ttt 641
Pro Cys Ser Asp Ala Glu Leu Leu Leu Ala Cys Thr Ser Asp Phe
175 180 185
gtg atc cac ggg acc atc cat ggg gtc gcc cat gac aca gag ctg caa 689
Val Ile His Gly Thr Ile His Gly Val Ala His Asp Thr Glu Leu Gln
190 195 200

21

gaa tca gtc atc act gtg gtg gtt gct cgt gtc atc cgc cag aca ctg 737
 Glu Ser Val Ile Thr Val Val Val Ala Arg Val Ile Arg Gln Thr Leu
 205 210 215

cca ctg ttc aag gaa ggg agc tcg gag ggc caa ggc cgg gcc tcc att 785
 Pro Leu Phe Lys Glu Gly Ser Ser Glu Gly Gln Gly Arg Ala Ser Ile
 220 225 230

cgt acc ttg ctg cgc tgt ggt gtg cgt cct ggc cca ggc tcc ttc ctc 833
 Arg Thr Leu Leu Arg Cys Gly Val Arg Pro Gly Pro Gly Ser Phe Leu
 235 240 245 250

ttc atg ggc tgg agc cga ttt ggc gaa gct tgg ctg ggc tgt gct ccc 881
 Phe Met Gly Trp Ser Arg Phe Gly Glu Ala Trp Leu Gly Cys Ala Pro
 255 260 265

cgc ttc caa gag ttc agc cgt gtc tat tca gct gct ctc acg acc cat 929
 Arg Phe Gln Glu Phe Ser Arg Val Tyr Ser Ala Ala Leu Thr Thr His
 270 275 280

ctc aac cca tgt gag atg gca ctg gac tga gagacctggg agcaagccct 979
 Leu Asn Pro Cys Glu Met Ala Leu Asp
 285 290

ggatggacct tcttctggag atggggtgtt ggggaggggtg atgggaggggt gggtgagaag 1039

ggtgtggctc ggatggcatc ctggtaccca cagttagctg gtagaataact aagtaatctg 1099

gaccatacca gccactgtag tcatggtctt ctgtggcagg cagcataccc agctctgtgc 1159

ctgcctcaact ttgtctactc tccagtctgc tgcccttcta acccttctta gcctgctgac 1219

cagttagctc atgttttctt cgaattccag ggtgctgctg gggttcagag caaccgtgcc 1279

gtagtttgga agacttgagc taattgtttt ttttttggtt gtttttttgt ttgttttaag 1339

gtggcctggg gggggcggca aaca 1363

<210> 26
 <211> 291
 <212> PRT
 <213> Mus musculus

<400> 26
 Met Leu Val Ala Thr Leu Leu Cys Ala Leu Cys Cys Gly Leu Leu Ala
 1 5 10 15

Ala Ser Ala His Ala Gly Tyr Ser Glu Asp Arg Cys Ser Trp Arg Gly
 20 25 30

Ser Gly Leu Thr Gln Glu Pro Gly Ser Val Gly Gln Leu Thr Leu Asp
 35 40 45

Cys Thr Glu Gly Ala Ile Glu Trp Leu Tyr Pro Ala Gly Ala Leu Arg
 50 55 60

Leu Thr Leu Gly Gly Pro Asp Pro Gly Thr Arg Pro Ser Ile Val Cys
 65 70 75 80

Leu Arg Pro Glu Arg Pro Phe Ala Gly Ala Gln Val Phe Ala Glu Arg
 85 90 95

Met Thr Gly Asn Leu Glu Leu Leu Leu Ala Glu Gly Pro Asp Leu Ala
 100 105 110

Gly Gly Arg Cys Met Arg Trp Gly Pro Arg Glu Arg Arg Ala Leu Phe
 115 120 125

22

Leu Gln Ala Thr Pro His Arg Asp Ile Ser Arg Arg Val Ala Ala Phe
 130 135 140
 Arg Phe Glu Leu His Glu Asp Gln Arg Ala Glu Met Ser Pro Gln Ala
 145 150 155 160
 Gln Gly Leu Gly Val Asp Gly Ala Cys Arg Pro Cys Ser Asp Ala Glu
 165 170 175
 Leu Leu Leu Ala Ala Cys Thr Ser Asp Phe Val Ile His Gly Thr Ile
 180 185 190
 His Gly Val Ala His Asp Thr Glu Leu Gln Glu Ser Val Ile Thr Val
 195 200 205
 Val Val Ala Arg Val Ile Arg Gln Thr Leu Pro Leu Phe Lys Glu Gly
 210 215 220
 Ser Ser Glu Gly Gln Gly Arg Ala Ser Ile Arg Thr Leu Leu Arg Cys
 225 230 235 240
 Gly Val Arg Pro Gly Pro Gly Ser Phe Leu Phe Met Gly Trp Ser Arg
 245 250 255
 Phe Gly Glu Ala Trp Leu Gly Cys Ala Pro Arg Phe Gln Glu Phe Ser
 260 265 270
 Arg Val Tyr Ser Ala Ala Leu Thr Thr His Leu Asn Pro Cys Glu Met
 275 280 285
 Ala Leu Asp
 290